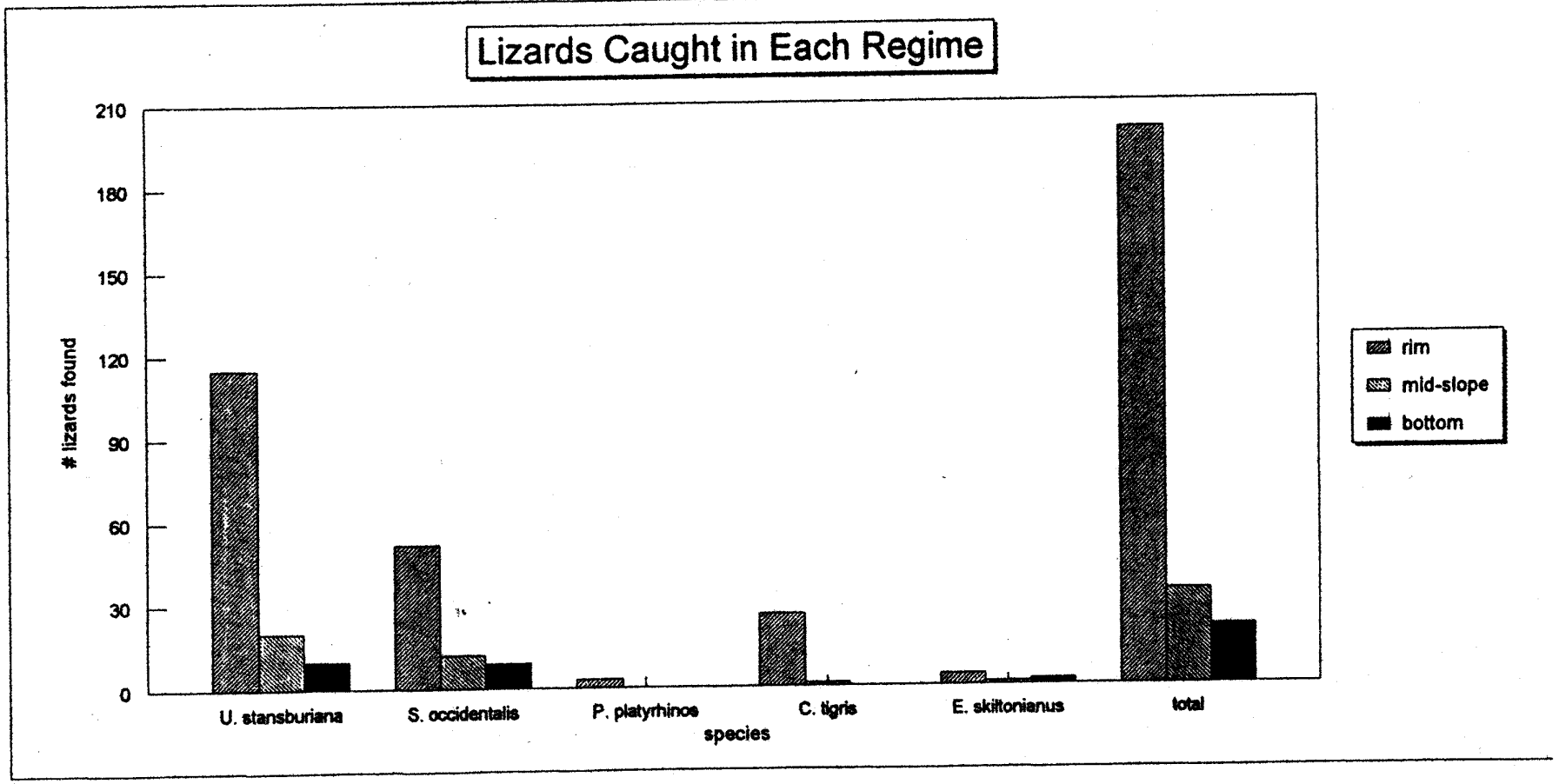
Lizards Caught in Each Regime
lizards found
210
180
150
120
90
60
30
0
U. stansburiana
S. occidentalis
P. platyrhinos
C. tigris
E. skiltonianus
total
species
rim
mid-slope
bottom

Figure 6

Visual Encounter Searches:

In addition to the data obtained from trapping, we found some notable herps during our visual encounter searches. On July 3, we stopped at Big Horse Basin Gap to survey primarily for *Crotaphytus bicinctores.* We found only one *C. bicinctores*, but in the wash that emerges from the gap, we found an unusually high number of *Sonora semiannulata* skins and living specimens. We also found one *Hypsiglena torquata.* All herps except the *C. bicinctores* were found by turning rocks. We returned to this site on Sept. 9, and found two *C. bincinctores* juveniles and no fresh *S. semiannulata* skins nor live specimens. We found *C. bicinctores* on hot sunny days in rocky areas north of the main bench. We found a *C. bicinctores* population at Big Jacks Creek where the pipeline and the creek meet. We found them consistently for about .5 mi to the east of Big Jacks Creek and for about 1.5 mi to the west. We found a population on the Oreana-Triangle Road just before climbing the bench.

DISCUSSION

Based on their geographic ranges (Nussbaum et al. 1985 and Stebbins 1986) the following reptiles and amphibians potentially occur in the study area; those marked with an asterisk were found during the course of this study.

Snakes:
*Western Rattlesnake (*Crotalus viridis*)
*Great Basin Gopher Snake (*Pituophis catenifer*)
*Western Yellow-bellied Racer (*Coluber constrictor*)
*Western Striped Whip snake (*Masticophis taeniatus*)
*Western Ground Snake (*Sonora semiannulata*)
*Night Snake (*Hypsiglena torquata*)
*Western Longnose Snake (*Rhinocheilus lecontei*)
*Western Terrestrial Garter Snake (*Thamnophis elegans*)
Common Garter Snake (*Thamnophis sirtalis*)
Rubber Boa (*Charina bottae*)

Lizards:
*Longnose Leopard Lizard (*Gambelia wislizenii*)
*Western Whiptail (*Cnemidophorus tigris*)
*Desert Horned Lizard (*Phrynosoma platyrhinos*)
*Short Horned Lizard (*Phrynosoma douglassi*)
*Side-blotched Lizard (*Uta stansburiana*)
*Western Fence Lizard (*Sceloporus occidentalis*)
*Sagebrush Lizard (*Sceloporus graciosus*)
*Mojave Black-collared Lizard (*Crotaphytus bicinctores*)
*Western Skink (*Eumeces skiltonianus*)

Amphibians:
*Pacific Treefrog *(Pseudacris regilla*)
Spotted Frog (*Rana pretiosa*)
Northern Leopard Frog (*Rana pipiens*)
Western Toad (*Bufo boreas*)
Woodhouse's Toad (*Bufo woodhousei*)
Great Basin Spadefoot Toad (*Spea intermontanus*)

Reptiles and amphibians potentially found in the study area represent 69% of the total species of reptiles and amphibians in Idaho. Additionally, Long-toed Salamanders (*Ambystoma macrodactylum*) could possibly be found in the study area because the salamander's range borders the study area, and habitat within the study area is similar to the preferred habitat of the salamander. As marked by an asterisk above, we found 17 of 19 potential reptile species during the course of the study.

We found reptiles in all three of the regimes that we surveyed: canyon bottom, mid-slope, and rim. The rim and canyon bottom regimes contained the most reptiles; relatively few were seen in the mid-slope regime, especially during the hottest part of the summer (Fig. 7).

Big Jacks Creek was surveyed using mainly standard drift fence arrays. The drift fence arrays were of two types, steel flashing and silt fence. Silt fence was set up to determine its effectiveness. Insufficient data was obtained to determine to what extent silt fence is effective. Lizards were seen climbing on the silt fence itself. Snakes have been observed using the upright posts to climb over the fence if the posts are placed too close to the fence (M. Gerber pers. obs.). We angled the uprights to eliminate the latter problem. Movement by reptiles in the trapping area was negligible, with very few being recaptured more than 50m from the original site of capture. We did capture an unusually high number of rattlesnakes in one array on the rim in the spring, but by mid summer we could only find one. This could be the result of a den in the vicinity of the array.

Visual searches did not appear to be effective during this study. We found a limited number of species of reptiles using this method. The areas that were surveyed were very rocky, and although rocks were turned, there were many deep talus runs that enabled snakes to retreat far below the surface, thus limiting the habitat that was practical to survey using this method. Except for one Western Groundsnake population, all reptiles that were seen were active foraging, diurnal species such as Gopher snakes, Racers, Whipsnakes, and Western Terrestrial Garter snakes. We occasionally encountered Western Rattlesnakes, which are usually crepuscular but were found frequently during mid morning hours. Representatives of all nine species of lizards found in this study were found during visual searches. Most of the lizards were found on the canyon rim while lizards on the canyon bottom were second in abundance. Mojave Black-collared lizards and Longnose Leopard lizard were recorded as incidentals.

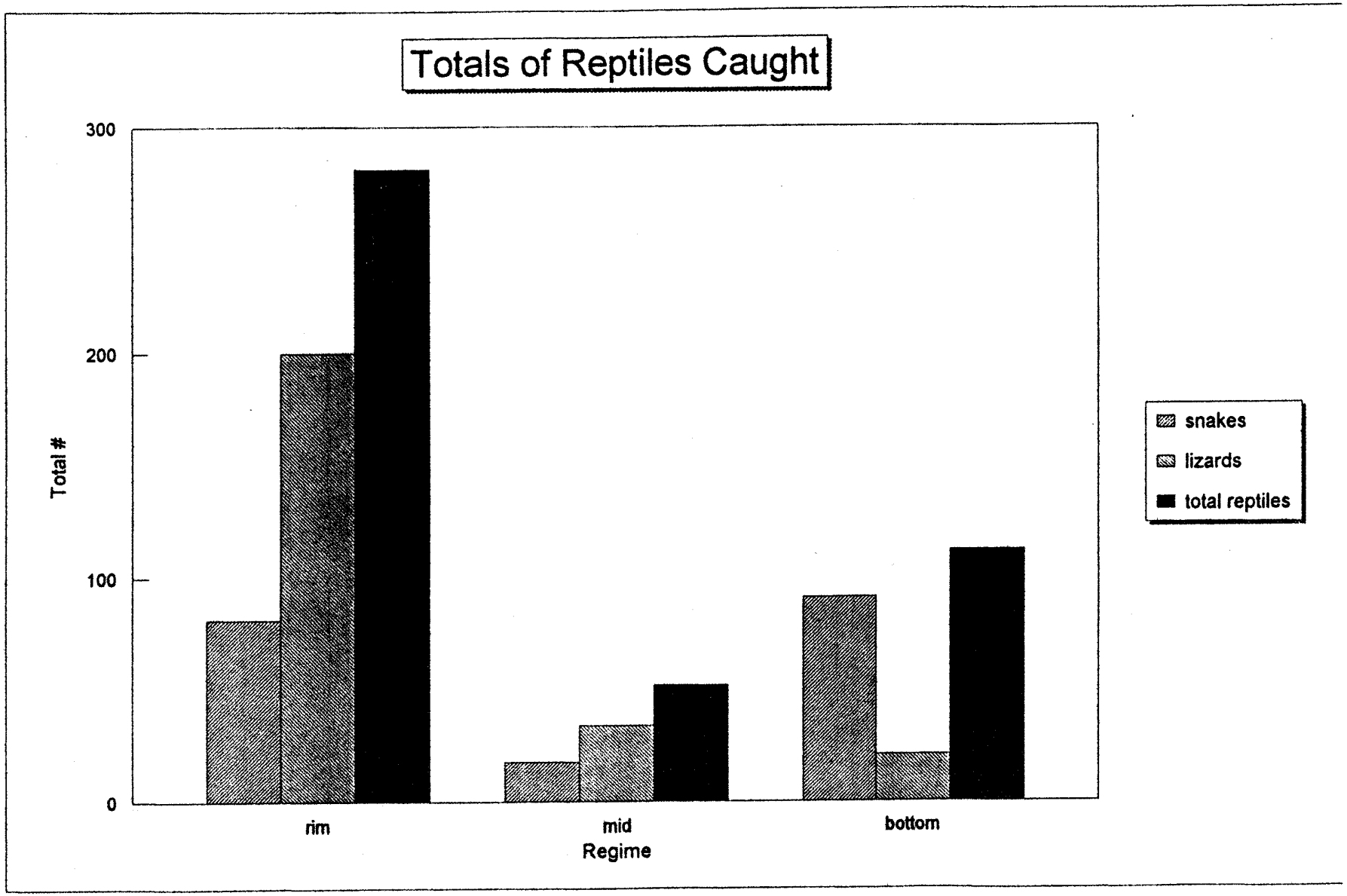
Totals of Reptiles Caught
300
200
100
0
Total #
rim
mid
bottom
Regime
snakes
lizards
total reptiles

Figure 7

SUMMARY

Sixteen species of reptiles and amphibians were found in this study, of which 13 were associated with the deep canyons. Canyon rims and canyon bottoms were utilized by reptiles the most. Western Terrestrial Garter Snakes were found strictly on the bottoms, and Western Rattlesnakes were found primarily on the rim. Gopher Snakes, Racers, and Striped Whipsnakes were found to be relatively abundant in all three regimes surveyed. There appeared to be little or no vertical movement of reptiles between regimes. These deep canyons are important areas in the desert for reptiles because they provide apparently suitable cover and forage for most of Idaho's reptiles. Most of the waterways in these deep canyons are perennial and provide apparently good habitat for reptile and amphibian species.

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Appendix: Capture information for summer of 1995. "Micro" refers to the trap array (see figure).
Regimes: bottom = bottom of canyon; m = midslope; r = rim of canyon; i = incidental (away from canyon.
UTM's and Elevations were taken from USGS 7.5' topographic maps.

Date	Time	Genus	Species	regime	Mark #	Micro	Temp C	Sun/Cloud	Wind	ER R	Legal	UTM N	UTM E	Elevation
Amphibians														
05/18/95	900	Pseudacris	regilla	i	no		10	clear	breezy		T11S R2E SEC 4			
05/19/95	1440	Pseudacris	regilla	b	no		26	clear	breezy		T9S R4E SEC 26	4714310	582310	4160
06/19/95	1557	Pseudacris	regilla	i	no		20	p/c	breezy		T11S R3E SEC9 SE SW SE			
06/19/95	1557	Pseudacris	regilla	i	no		20	p/c	breezy		T11S R3E SEC9 SE SW SE			
05/18/95	1003	Pseudacris	regilla	i	no		17	clear	breezy		T10S R2E SEC 20	4706425	564580	5620
Lizards														
07/03/95	1744	Cnemidophoris	tigris	r	no		21	P/C	windy	7	T10S R4E SEC 4 NW NE NE	4715740	583180	4800
07/03/95	1437	Cnemidophoris	tigris	i	no		22	P/C	windy	7	T7S R4E SEC 22 NE SE SE	4738660	586620	2660
07/03/95	1731	Cnemidophoris	tigris	r	no	2:F	21	P/C	windy	7	T10S R4E SEC 4 NW NE NE	4715760	583350	4600
07/03/95	1202	Cnemidophoris	tigris	i	no		21	M/C	breezy	8.5	T8S R3E SEC 14 SE NW SW	4730460	576300	3656
07/03/95	1156	Cnemidophoris	tigris	i	no		21	M/C	breezy	6	T8S R3E SEC 14 SE NW SW	4730460	576300	3656
07/03/95	1030	Cnemidophoris	tigris	i	no		23	P/C	breezy	8	T7S R4E SEC 22 NE SE SE	4738420	585160	2820
07/05/95	2027	Cnemidophoris	tigris	r	no	3:5:A	27	P/C	breezy	8.5	T10S R4E SEC 4 NW NE NE	4715730	583260	4580
07/08/95	929	Cnemidophoris	tigris	i	no		23	P/C	breezy	60	T7S R5E SEC 19 SW NE NW	4741240	590080	2660
07/08/95	1056	Cnemidophoris	tigris	r	no		27	M/C	breezy	6	T10S R4E SEC 4 NW NE NE	4715730	583240	4590
07/08/95	1052	Cnemidophoris	tigris	r	no	2:C	27	M/C	breezy	7	T10S R4E SEC 4 NW NE NE	4715760	583350	4600
07/12/95	1318	Cnemidophoris	tigris	r	no	3:D	15	cloudy	windy	7	T10S R4E SEC 4 NW NE NE	4715790	583260	4600
07/12/95	1315	Cnemidophoris	tigris	r	no	2:E	15	cloudy	windy	7	T10S R4E SEC 4 NW NE NE	4715760	583350	4600
07/23/95	1050	Cnemidophoris	tigris	i	no		21	clear	breezy	9	T2S R2W SEC 27 NE NE SE	4785100	536310	2760
07/29/95	632	Cnemidophoris	tigris	r	no	4:B	20	cloudy	windy	8	T10S R4E SEC 4 NE NW NE	4715770	583180	4600
07/29/95	638	Cnemidophoris	tigris	r	no	4.5:F	21	cloudy	windy	6	T10S R4E SEC 4 NE NW NE	4715740	583120	4590
08/29/95	811	Cnemidophoris	tigris	r	no	2:D	14	clear	windy	8.5	T10S R4E SEC 4 NW NE NE	4715760	583350	4600
05/25/95	1304	Cnemidophorus	tigris	r	no		22	p/c	breezy	7	T10S R4E SEC 4 NW SW NE	4715690	583080	4500
05/25/95	1337	Cnemidophorus	tigris	m	no		23	p/c	breezy	10	T10S R4E SEC 4 NW SW NE	4715680	582970	4400
05/27/95	1159	Cnemidophorus	tigris	r	no		20	clear	breezy	12	T10S R4E SEC 4 SW NW NE	4715710	583000	4400
05/29/95	1718	Cnemidophorus	tigris	i	no		25	clear	breezy	8	4E 7S S28 SW NE	4737080	588480	2750
05/30/95	1157	Cnemidophorus	tigris	r	no		27	clear	breezy	8	T10S R4E SEC 4 NE NW NE	4715690	582080	4400
06/12/95	1300	Cnemidophorus	tigris	i	no		30	clear	none	8	T8S R4E SEC 5 SW SE SE	4733220	581910	2780
06/12/95	1305	Cnemidophorus	tigris	i	no		30	clear	none	9	T8S R4E SEC 5 SW SE SE	4733220	581910	2780
06/12/95	1155	Cnemidophorus	tigris	i	no		25	clear	breezy	9	T11S R5E SEC 18 NW NE NE	4741240	590080	2660
06/12/95	1257	Cnemidophorus	tigris	i	no		30	clear	none	8	T8S R4E SEC 5 SW SE SE	4733220	581910	2780
06/26/95	1242	Cnemidophorus	tigris	r	no	2:C	32	clear	breezy	11	T10S R4E SEC 4 NW NE NE	4715760	583350	4600
06/26/95	928	Cnemidophorus	tigris	i	no		22	clear	none	7	T7S R5E SEC 7 SE NE SE	4739160	589140	2700
06/26/95	1222	Cnemidophorus	tigris	r	no	1:E	32	clear	breezy	9.5	T10S R4E SEC 4 SE NE NE	4715740	583460	4610
06/26/95	1242	Cnemidophorus	tigris	r	no	4:E	32	clear	breezy	10	T10S R4E SEC 4 NW NE NE	4715770	583180	4600
06/26/95	1222	Cnemidophorus	tigris	r	no	1:E	32	clear	breezy	9.5	T10S R4E SEC 4 SE NE NE	4715740	583460	4610
06/26/95	1221	Cnemidophorus	tigris	r	no	1:D	32	clear	breezy	10	T10S R4E SEC 4 SE NE NE	4715740	583460	4610
06/28/95	1312	Cnemidophorus	tigris	r	no	4.5:G	29	clear	breezy	4.5	T10S R4E SEC 4 NE NW NE	4715740	583120	4590
06/28/95	1157	Cnemidophorus	tigris	r	no	5:D	22	clear	breezy	4.5	T10S R4E SEC 4 NE NW NE	4715770	583070	4600
06/29/95	936	Cnemidophorus	tigris	i	no		17	clear	breezy	9	T8S R5E SEC8 NW NE NW	4733720	587020	3020
06/29/95	1221	Cnemidophorus	tigris	i	no		25	clear	breezy	9	T7S R4E SEC 29 SW SW SE	4733880	581910	2780
06/29/95	1221	Cnemidophorus	tigris	i	no		25	clear	breezy	9	T7S R4E SEC 32 NE NW NW	4733780	581910	2780
07/01/95	1845	Cnemidophorus	tigris	r	no	2:C	25	P/C	breezy	8	T10S R4E SEC 4 NW NE NE	4715760	583350	4600
07/01/95	1829	Cnemidophorus	tigris	r	no	1:G	26	P/C	breezy	8	T10S R4E SEC 4 SE NE NE	4715740	583460	4610
07/15/95	1330	Cnemidophorus	tigris	r	no		33	clear	breezy	8	T10S R4E SEC 4 NW NE NE	4715790	583220	4600
07/15/95	1305	Cnemidophorus	tigris	r	no	4.5:F	33	clear	calm	9.5	T10S R4E SEC 4 NE NW NE	4715740	583120	4590
07/18/95	1140	Cnemidophorus	tigris	r	no	4.5:E	31	clear	breezy	8	T10S R4E SEC 4 NE NW NE	4715740	583120	4590
07/18/95	1150	Cnemidophorus	tigris	r	no	2:C	31	clear	breezy	9.5	T10S R4E SEC 4 NW NE NE	4715760	583350	4600
06/12/95	1448	Crotaphytus	bicinctores	i	no		30	clear	breezy	9	T8S R4E SEC 5 NW SE NW	4734250	581330	2960
06/12/95	1520	Crotaphytus	bicinctores	i	no		30	clear	breezy	10	T8S R4E SEC 5 NW NW NW	4734250	581330	2960
06/12/95	1520	Crotaphytus	bicinctores	i	no		30	clear	breezy	11	T8S R4E SEC 5 NW NW NW	4734250	581330	2960
06/12/95	1520	Crotaphytus	bicinctores	i	no		30	clear	breezy	9	T8S R4E SEC 5 NW NW NW	4734250	581330	2960
06/12/95	1257	Crotaphytus	bicinctores	i	no		30	clear	none	10	T8S R4E SEC 5 SW SE SE	4733220	581910	2780
06/12/95	1257	Crotaphytus	bicinctores	i	no		30	clear	none	8	T8S R4E SEC 5 SW SE SE	4733220	581910	2780
06/12/95	1300	Crotaphytus	bicinctores	i	no		30	clear	none	11	T8S R4E SEC 5 SW SE SE	4733220	581910	2780
06/12/95	1511	Crotaphytus	bicinctores	i	no		30	clear	breezy	9	T8S R4E SEC 5 SE SE NW	4734250	581330	2960
06/12/95	1511	Crotaphytus	bicinctores	i	no		30	clear	breezy	9	T8S R4E SEC 5 SE SE NW	4734250	581330	2960
06/12/95	1511	Crotaphytus	bicinctores	i	no		30	clear	breezy	10	T8S R4E SEC 5 SE SE NW	4734250	581330	2960
06/12/95	1514	Crotaphytus	bicinctores	i	no		30	clear	breezy	9	T8S R4E SEC 5 SE SE NW	4734250	581330	2960
06/12/95	1511	Crotaphytus	bicinctores	i	no		30	clear	breezy	10	T8S R4E SEC 5 SE SE NW	4734250	581330	2960
06/12/95	1520	Crotaphytus	bicinctores	i	no		30	clear	breezy	10	T8S R4E SEC 5 NW NW NW	4734250	581330	2960
06/12/95	1448	Crotaphytus	bicinctores	i	no		30	clear	breezy	9	T8S R4E SEC 5 NW SE NW	4734250	581330	2960
06/29/95	1210	Crotaphytus	bicinctores	i	no		25	clear	breezy	12	T8S R4E SEC 5 SW SW NW	4733340	581930	2780
06/29/95	1213	Crotaphytus	bicinctores	i	no		25	clear	breezy	10	T8S R4E SEC 5 SW SW NW	473350	581940	2780
06/29/95	1147	Crotaphytus	bicinctores	i	no		24	clear	breezy	12	T8S R4E SEC 8 NW NW NE	4733220	581910	2780
06/29/95	1147	Crotaphytus	bicinctores	i	no		24	clear	breezy	12	T8S R4E SEC 8 NW NW NE	4733220	581910	2780
06/29/95	1215	Crotaphytus	bicinctores	i	no		25	clear	breezy	11	T7S R4E SEC31 SE NE NE	4733690	581910	2780
07/03/95	1149	Crotaphytus	bicinctores	i	no		21	M/C	breezy	10	T8S R3E SEC 14 SE NW SW	4730460	576300	3656
07/22/95	1435	Crotaphytus	bicinctores	i	no		27	P/C	breezy	12	T5S R1W SEC 1 NE NE NE			
09/09/95	1330	Crotaphytus	bicinctores	i	no		23	clear	breezy	12	T8S R3E SEC 14 SE NW SW	4730460	576300	3656
09/09/95	1330	Crotaphytus	bicinctores	i	no		27	clear	breezy	11	T8S R3E SEC 14 SE NW SW	4730460	576300	3656
05/20/95	1930	Eumeces	skiltonianus	r	no		28	P/C	breezy	8	T10S R4E SEC 4 NW NE NE	4715740	583350	4600
05/30/95	816	Eumeces	skiltonianus	r	no	4:E	20	clear	calm	4	T10S R4E SEC 4 NW NE NE	4715770	583180	4600
06/01/95	2041	Eumeces	skiltonianus	b	no	13:A	19	cloudy	breezy	6	T9S R4E SEC 33 SE SE SW	4716090	582710	4160
06/11/95	1053	Eumeces	skiltonianus	b	no	13:D	23	clear	none	8	T9S R4E SEC 33 SE SE SW	4716090	582710	4160
06/28/95	1620	Eumeces	skiltonianus	m	no	9:G	32	clear	breezy	7	T10S R4E SEC 4 SW NW NE	4715520	582970	4420
07/01/95	1909	Eumeces	skiltonianus	r	no	4.5:D	25	P/C	breezy	4	T10S R4E SEC 4 NE NW NE	4715740	583120	4590
07/15/95	1305	Eumeces	skiltonianus	r	no	4.5:E	32	clear	breezy	5	T10S R4E SEC 4 NE NW NE	4715740	583120	4590
06/06/95	1717	Gambelia	wislizenii	i	no		15	cloudy	breezy	9	T7S R5E SEC 31 SW NW NW	4741840	570260	3170
06/06/95	1707	Gambelia	wislizenii	i	no		15	m/c	breezy	15	T7S R5E SEC 30 SW SW SW	4742740	571740	3079
06/12/95	1232	Gambelia	wislizenii	i	no		30	clear	breezy	8	T8S R4E SEC 2 SE NE NE	4733360	586620	3120
06/29/95	954	Gambelia	wislizenii	i	no		20	clear	windy	9	T8S R4E SEC 2 SE SE NE	4733360	586620	3120
07/03/95	1033	Gambelia	wislizenii	r	no		24	P/C	breezy	8	T7S R4E SEC 22 NE SE SE	4736320	585150	2820
07/18/95	1207	Gambelia	wislizenii	i	no		32	clear	breezy	10	T10S R4E SEC 9 SW SW SW	4711150	589950	4780
07/18/95	920	Gambelia	wislizenii	m	no	6:B	25	p/c	breezy	8.5	T10S R4E SEC 4 SW NW NE	4715620	582970	4400
07/22/95	1400	Gambelia	wislizenii	i	no		27	P/C	breezy	11	T5S R1E SEC 31 SW NW NW			
07/24/95	1917	Phrynosoma	douglassi	i	no		25	clear	breezy	7	T3N R4W S15 SE SW NE	4711150	589860	4780
06/18/95	1443	Phrynosoma	douglassi	r	no		17	cloudy	breezy	4	T10S R4E SEC 4 NE NW NE	4715700	583350	4620